

WHAT IS CLAIMED IS:

1. An ink jet printing method comprising the steps of:
- 5 A) providing an ink jet printer that is responsive to digital data signals;
- B) loading said printer with an ink jet recording element comprising a support having thereon an image-receiving layer comprising porous polymeric particles in a polymeric binder, said porous polymeric particles being prepared in the presence of an anionic or cationic dispersant, and said image-receiving layer
- 10 containing a surfactant having a charge opposite to that of said dispersant used to make said porous polymeric particles, said surfactant being present in an amount from about 0.04 parts to about 0.30 parts by weight of said dispersant;
- C) loading said printer with an ink jet ink composition; and
- D) printing on said ink jet recording element using said ink jet ink
- 15 composition in response to said digital data signals.
2. The ink jet printing method of Claim 1 wherein said porous polymeric particles have a median diameter of less than about 10 μm .
- 20 3. The ink jet printing method of Claim 1 wherein said porous polymeric particles are crosslinked and have a degree of crosslinking of about 27 mole % or greater.
4. The ink jet printing method of Claim 1 wherein said porous
- 25 polymeric particles are made from a styrenic or an acrylic monomer.
5. The ink jet printing method of Claim 4 wherein said acrylic monomer comprises methyl methacrylate or ethylene glycol dimethacrylate.
- 30 6. The ink jet printing method of Claim 1 wherein said polymeric binder comprises a poly(vinyl alcohol), a gelatin, a cellulose ether, poly(vinyl pyrrolidone) or poly(ethylene oxide).

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7. The ink jet printing method of Claim 1 wherein said support is paper or a voided plastic material.

5 8. The ink jet printing method of Claim 1 wherein the porosity of said porous polymeric particles is achieved by mixing a porogen with the monomers used to make said polymeric particles, dispersing the resultant mixture in water, and polymerizing said monomers to form said porous polymeric particles.

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9. The ink jet printing method of Claim 1 wherein said porous polymeric particles have a surface area of at least about $35 \text{ m}^2/\text{g}$.

10. The ink jet printing method of Claim 1 wherein said porous
15 polymeric particles have a surface area of at least about $100 \text{ m}^2/\text{g}$.

11. The ink jet printing method of Claim 1 wherein said polymeric particles are prepared in the presence of an anionic dispersant.

20 12. The ink jet printing method of Claim 11 wherein said anionic dispersant is sodium dodecylbenzenesulfonate, sodium dodecylsulfate, the sodium salt of N-oleyl-N-methyltaurine, or the dioctyl ester of sodium sulfosuccinic acid.

13. The ink jet printing method of Claim 1 wherein said polymeric
25 particles are prepared in the presence of an cationic dispersant.

14. The ink jet printing method of Claim 13 wherein said cationic dispersant is N-Alkyl(C12-C16)-N,N-dimethyl-N-benzyl ammonium chloride.

30 15. The ink jet printing method of Claim 1 wherein said surfactant is anionic.

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16. The ink jet printing method of Claim 15 wherein said anionic surfactant is sodium dodecylbenzenesulfonate, sodium dodecylsulfate, the sodium salt of N-oleyl-N-methyltaurine, or the dioctyl ester of sodium sulfosuccinic acid.

5 17. The ink jet printing method of Claim 1 wherein said surfactant is cationic.

10 18. The ink jet printing method of Claim 17 wherein said cationic surfactant is N-Alkyl(C12-C16)-N,N-dimethyl-N-benzyl ammonium chloride.

15 19. The ink jet printing method of Claim 1 wherein said image-receiving layer contains from about 0.20 to about 10.0 g/m² of said polymeric binder and from about 1.5 to about 60 g/m² of said porous polymeric particles.

20 20. The ink jet printing method of Claim 1 wherein said image-receiving layer contains from about 0.40 to about 5.0 g/m² of said polymeric binder and from about 3.0 to about 30 g/m² of said porous polymeric particles.

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